

**DETAILED ACTION**

In view of the Appeal Brief filed on 06/22/2011, PROSECUTION IS HEREBY REOPENED as set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/DAVID DUNN/

Supervisory Patent Examiner, Art Unit 3636.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14, 18-20, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekido et al (U.S. Patent No. 4,965,899) in view of Walker et al (U.S. Patent Application Publication No. 2003/0197413 A1).

Sekido et al teach the structure substantially as claimed including a seat **A** and a tiltable back **B**, since vehicle seats have tiltably adjustable seat backs, said back comprising: a rear support ( see substantially planar structure not labeled in Figures 23-24 and 70), a cushion layer located forward of said fluid containing cushion (See Figures 23-24 and 70), an upholstery layer located forward of said cushion layer; wherein a fluid containing cushion **1** (See Figures 7-12 and 14) having a seal along a top portion, a seal along a bottom portion, a seal along a left side portion and a seal along a right side portion, said fluid containing cushion located forward of said rear support (see Figures 23-24 and 70); wherein said fluid containing cushion includes two layers sealed to form a vertically extending central chamber of generally constant width and vertically extending left and right side chambers (See Figures 7-12 and 14), each of said chambers being completely sealed from one another (See Figures 7-12 and 14 and column 6, lines 35-43, where it reads "The main body (1) of the air bag in the above-mentioned preferred embodiment is operated such that when air is supplied through feeding and discharging ports (3) of the inner plugs, the opposed inner surfaces of the main body (1) are expanded with a specified clearance being kept by the suspension fabrics (2), their cross sectional shapes are kept in a rectangular form, sub-air chambers

(4) may be independently formed or communicated to each other."), wherein said cushion comprises a plurality of chambers extending from a lower region of the cushion to an upper region of the cushion.

As for claim 30, Sekido et al teach said fluid containing cushion includes two layers sealed along a top portion, a bottom portion, a left side portion and a right side portion, first and second straight vertical seams attaching said two layers, said first and second vertical seals extending from the top portion seal to the bottom portion seal to form a first completely sealed centrally located fluid chamber, a third vertical seam extending from the top portion seal toward the bottom portion seal to form second and third side chambers, said second and third side chambers being in fluid communication with each other but not with said first chamber, and a fourth vertical seam extending from the top portion seal toward the bottom portion seal to form fourth and fifth side chambers, said fourth and fifth side chambers being in fluid communication with each other but not with said first chamber (see Fig. 8 and column 6, lines 35-43, where it reads "The main body (1) of the air bag in the above-mentioned preferred embodiment is operated such that when air is supplied through feeding and discharging ports (3) of the inner plugs, the opposed inner surfaces of the main body (1) are expanded with a specified clearance being kept by the suspension fabrics (2), their cross sectional shapes are kept in a rectangular form, sub-air chambers (4) may be independently formed or communicated to each other."), said sealed central chamber extends between said top and bottom portions of said cushion between two spaced apart straight, vertically extending seams, wherein: said left and right chambers extend between said

top and bottom portions of said cushion, said two layers of said fluid containing cushion are generally air impermeable, each of said two layers of said fluid containing cushion includes multiple layers (See Fig. 35, 39, and 43 where Sekido et al teaches the use of multiple layers in the fluid containing cushions).

But Sekido et al but do not teach that the lumbar region is defined by a curvature in the rear support. However, Walker et al teaches a rear support 14 including a lumbar region defined by a curvature in the rear support, wherein the curvature conforms generally to a user's lumbar region to be old. It would have been obvious and well within the level of ordinary skill in the art to modify the structure, as taught by Sekido et al, to include a rear support including a lumbar region defined by a curvature in the rear support, as taught by Walker et al, since the curvature conforms generally to a user's lumbar region.

Claims 14, 18-20, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidmann (U.S. Patent No. 6,616,228 B2) in view of Sekido et al (U.S. Patent No. 4,965,899).

Heidmann teaches the structure substantially as claimed including a chair having a seat and a tiltable back, said back comprising: a rear support **26** including a lumbar region defined by a curvature in the rear support, wherein the curvature conforms generally to a user's lumbar region; a fluid containing cushion **39'** having a seal along a top portion, a seal along a bottom portion, a seal along a left side portion and a seal along a right side portion, said fluid containing cushion located forward of said rear

support; wherein but does not teach the fluid containing cushion to include two layers sealed to form a vertically extending central chamber of generally constant width and vertically extending left and right side chambers, each of said chambers being completely sealed from one another. However, Sekido et al teach the concept of placing a fluid containing cushion in front of a rear support ( see substantially planar structure not labeled in Figures 23-24 and 70), a cushion layer located forward of said fluid containing cushion (See Figures 23-24 and 70), an upholstery layer located forward of said cushion layer; wherein a fluid containing cushion 1 (See Figures 7-12 and 14) having a seal along a top portion, a seal along a bottom portion, a seal along a left side portion and a seal along a right side portion, said fluid containing cushion located forward of said rear support (see Figures 23-24 and 70); wherein said fluid containing cushion includes two layers sealed to form a vertically extending central chamber of generally constant width and vertically extending left and right side chambers (See Figures 7-12 and 14), each of said chambers being completely sealed from one another (See Figures 7-12 and 14 and column 6, lines 35-43, where it reads "The main body (1) of the air bag in the above-mentioned preferred embodiment is operated such that when air is supplied through feeding and discharging ports (3) of the inner plugs, the opposed inner surfaces of the main body (1) are expanded with a specified clearance being kept by the suspension fabrics (2), their cross sectional shapes are kept in a rectangular form, sub-air chambers (4) may be independently formed or communicated to each other."), wherein said cushion comprises a plurality of

chambers extending from a lower region of the cushion to an upper region of the cushion.

As for claim 30, Sekido et al teach said fluid containing cushion includes two layers sealed along a top portion, a bottom portion, a left side portion and a right side portion, first and second straight vertical seams attaching said two layers, said first and second vertical seals extending from the top portion seal to the bottom portion seal to form a first completely sealed centrally located fluid chamber, a third vertical seam extending from the top portion seal toward the bottom portion seal to form second and third side chambers, said second and third side chambers being in fluid communication with each other but not with said first chamber, and a fourth vertical seam extending from the top portion seal toward the bottom portion seal to form fourth and fifth side chambers, said fourth and fifth side chambers being in fluid communication with each other but not with said first chamber (see Fig. 8 and column 6, lines 35-43, where it reads "The main body (1) of the air bag in the above-mentioned preferred embodiment is operated such that when air is supplied through feeding and discharging ports (3) of the inner plugs, the opposed inner surfaces of the main body (1) are expanded with a specified clearance being kept by the suspension fabrics (2), their cross sectional shapes are kept in a rectangular form, sub-air chambers (4) may be independently formed or communicated to each other."), said sealed central chamber extends between said top and bottom portions of said cushion between two spaced apart straight, vertically extending seams, wherein: said left and right chambers extend between said top and bottom portions of said cushion, said two layers of said fluid containing cushion

are generally air impermeable, each of said two layers of said fluid containing cushion includes multiple layers (See Fig. 35, 39, and 43 where Sekido et al teaches the use of multiple layers in the fluid containing cushions).

It would have been obvious and well within the level of ordinary skill in the art to modify the structure, as taught by Heidmann, to include fluid containing cushion and a cushion layer located forward of the fluid containing cushion, and an upholstery layer located forward of said cushion layer, as taught by Sekido et al, since the combination of structures as taught by Sekido et al would result in a greater degree of adjustability to the back of the chair and thus a more comfortable chair to various individual users of the chair and their specific comfort needs.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekido et al (U.S. Patent No. 4,965,899) in view of Walker et al (U.S. Patent Application Publication No. 2003/0197413 A1) as applied to claim 18 above, and further in view of Lin (U.S. Patent Application Publication No. 2004/0232756 A1).

Sekido et al in view of Walker et al teach the structure substantially as claimed but does not teach that the chambers are partially divided as defined in claim 21. However, Lin teaches the concept of partially dividing chambers by vertically directed seams, such as 23 (See Figures 3-4). It would have been obvious and well within the level of ordinary skill in the art to partially divide the left and right side chambers, as taught by Sekido et al, by vertically directed seams, as taught by Lin, since such

multiple and/or smaller chambers would allow for incremental and more area specific adjustments of the fluid cushion and provide a greater degree of adjustability.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heidmann (U.S. Patent No. 6,616,228 B2) in view of Sekido et al (U.S. Patent No. 4,965,899) as applied to claim 18 above, and further in view of Lin (U.S. Patent Application Publication No. 2004/0232756 A1).

Heidmann in view of Sekido et al teach the structure substantially as claimed but does not teach that the chambers are partially divided as defined in claim 21. However, Lin teaches the concept of partially dividing chambers by vertically directed seams, such as 23 (See Figures 3-4). It would have been obvious and well within the level of ordinary skill in the art to partially divide the left and right side chambers, as taught by Sekido et al, by vertically directed seams, as taught by Lin, since such multiple and/or smaller chambers would allow for incremental and more area specific adjustments of the fluid cushion and provide a greater degree of adjustability.

Claims 22-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because it teaches structures and concepts similar to those of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney B. White whose telephone number is (571) 272-6863. The examiner can normally be reached on 5:30 AM - 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rodney B. White/  
Primary Examiner,  
Art Unit 3636  
August 19, 2011